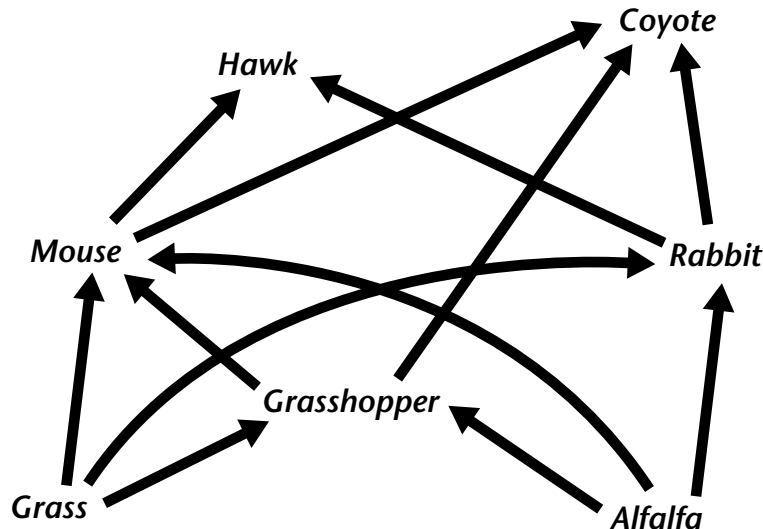


Ecosystems and Biomes ▪ *Review and Reinforce***Energy Flow in Ecosystems****Understanding Main Ideas**

Answer the following questions on a separate sheet of paper.



1. Which organism in the food web above is sometimes a first-level consumer and sometimes a second-level consumer? Explain.
2. Choose one food chain in the web. Name all the organisms in that chain. Start with the producer and end with the top-level consumer.
3. Draw an energy pyramid for the food chain you chose. Label the pyramid to tell how much food energy is available at each level.

Building Vocabulary

On a separate sheet of paper, write the term that fits each definition below.

4. Organisms that make their own food
5. Organisms that obtain energy by feeding on other organisms
6. Organisms that break down wastes and dead organisms and return the raw materials to the environment
7. Consumers that eat only animals
8. Consumers that eat only plants
9. Consumers that eat both plants and animals
10. Consumers that feed on the bodies of dead organisms

Ecosystems and Biomes ▪ *Enrich***Food Webs at Hydrothermal Vents**

Deep below the ocean's surface are strange ecosystems called hydrothermal vents. Here, heated water rises up through cracks in the ocean floor. The water contains minerals from Earth's interior. No sunlight ever reaches these vents. No plants or algae live there. The table below lists the organisms found at hydrothermal vents.

Life at a Hydrothermal Vent

Organisms	Obtain food energy from...
Shrimp	Bacteria in the water
Crabs	Remains of other organisms
Giant clams	Bacteria in the water
Bacteria	Make their own food from chemicals in the water
Giant tube worms	Bacteria living inside their bodies

Use the information in the table to respond to the following items.

1. Which organisms are the producers at hydrothermal vents?

2. Which organisms are first-level consumers?

3. What type of consumer are the crabs?

4. In the space below, draw the food web at a hydrothermal vent. Label each organism to identify its energy role in the ecosystem.